







# Questions

- Can you show an example controller method in Spring MVC?
- Can you explain a simple flow in Spring MVC?
- What is a ViewResolver?
- What is Model?
- What is ModelAndView?
- What is a RequestMapping?

### Your Todos in English

Description	Target Date	Is Completed?		
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Learn Spring MVC	28/07/2017	false	<a href="#">Update</a>	<a href="#">Delete</a>
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# Controller Method

```
@RequestMapping(value = "/list-todos",  
    method = RequestMethod.GET)  
public String listTodos(ModelMap model) {  
    model.addAttribute("todos",  
        service.retrieveTodos(retrieveLoggedInUserName()));  
    return "list-todos";  
}
```



# Questions

- What is Dispatcher Servlet?
- How do you set up Dispatcher Servlet?

```
<servlet>
  <servlet-name>dispatcher</servlet-name>
  <servlet-class>org.springframework.web.servlet.DispatcherServlet
  <init-param>
    <param-name>contextConfigLocation</param-name>
    <param-value>/WEB-INF/todo-servlet.xml</param-value>
  </init-param>
  <load-on-startup>1</load-on-startup>
</servlet>

<servlet-mapping>
  <servlet-name>dispatcher</servlet-name>
  <url-pattern>/</url-pattern>
</servlet-mapping>
```

# Path Variable

- <http://localhost:8080/todos/1>

```
@RequestMapping(value = "/todos/{id}")  
public Todo retrieveTodo(@PathVariable int id) {  
    return service.retrieveTodo(id);  
}
```



```
@ModelAttribute  
public void addAttributes(Model model) {  
    model.addAttribute("options",  
        Arrays.asList(  
            "Option 1", "Option 2", "Option 3" ));  
}
```

# @SessionAttributes

List the names of model attributes which should be transparently stored in the session or some conversational storage.

```
@SessionAttributes("name")  
public class TodoController {
```

Binder

```
protected void initBinder(WebDataBinder binder) {  
    SimpleDateFormat dateFormat = new SimpleDateFormat("dd/MM/yyyy");  
    binder.registerCustomEditor(Date.class, new CustomDateEditor(  
        dateFormat, false));  
}
```



# Questions

- How to handle exceptions for web applications?
- What are the important things to think about when implementing Exception Handling?
- How do you implement Specific Error Handling for a Spring MVC Controller?

# ExceptionHandler

@ControllerAdvice

```
public class ExceptionController {
```

```
    private Log logger = LoggerFactory.getLog(ExceptionController.c
```

```
    @ExceptionHandler(value = Exception.class)
```

```
    public String handleException
```

```
        (HttpServletRequest request, Exception ex) {
```

```
        logger.error("Request " + request.getRequestURL()
```

```
            + " Threw an Exception", ex);
```

```
        return "error";
```

```
}
```



# ExceptionHandler

```
@ControllerAdvice
public class ExceptionController {

    private Log logger = LogFactory.getLog(ExceptionController.class);

    @ExceptionHandler(value = Exception.class)
    public String handleException
        (HttpServletRequest request, Exception ex) {
        logger.error("Request " + request.getRequestURL()
            + " Threw an Exception", ex);
        return "error";
    }
}
```



# Spring MVC

- Clear Separation of Concerns
  - Dispatcher Servlet
  - View Resolver
  - View
  - Model